



New levels of reliability for hydraulic systems

Emmie Mobile Separation System for Hydraulic Oil



Emmie will pay for itself in one year! Nearly all hydraulic system failures onboard ships and in power plants are due to contaminants in the hydraulic oil. Emmie, Alfa Laval's mobile cleaning system for hydraulic oil, will increase the reliability of sensitive, vital hydraulic equipment, reduce component wear, and extend the lifetime of the hydraulic oil in the system.

Recognize these problems?

• **Frequent, costly failure of hydraulic systems due to contaminated oil.**

Leaking seals in systems in contact with seawater (on ships), allow water to enter the system. Water in the hydraulic system:

- > Shortens the oil's lifetime, causing corrosion of internal surfaces, and extra wear due to poor lubrication.
- > Causes additives to decompose rapidly and oxidation, which affects the oil's viscosity.

The full-flow filter only removes particles down to 15–25 µm. Finer particles left by the filter in the hydraulic oil:

- > Shorten the lifetimes of rolling bearings while causing extra internal wear on hydraulic components, and leaking seals.
- > Cause equipment failure due to sticking pilot valves.

• **Filter cartridges quickly become saturated and must be changed. High costs for cartridge disposal and replacement.**

• **Hydraulic oil frequently becomes contaminated and must be replaced, High costs for hydraulic oil disposal and replacement.**



Throughput capacity: 80–120 l/h.

Invest in an Emmie Mobile Separation System

Emmie – a small revolution.

Emmie is a mobile separation system that can be wheeled easily between hydraulic tanks. The system includes:

- > A miniature, trolley mounted MIB 303 solid bowl separator designed for cleaning hydraulic oils, with a collecting tank for oil spill and separated water. Weight 55 kg.
- > A separate, compact, mobile oil pre-heater, weighing only 34 kg, that heats the hydraulic oil up to 65°C max.

Emmie will provide a drastic increase in the reliability and availability of your hydraulic systems.

- > Removes virtually all water from the hydraulic oil.
- > Removes more than 99% of particles in the size range 2 µm – 5 µm.
- > Provides efficient back-up for the full-flow filter, drastically cutting cartridge consumption.

Emmie cuts operating costs related to hydraulic systems.

- > Impressive reduction in costly equipment failure.
- > The lifetime of the hydraulic oil is extended.

Emmie Mobile Separation System

A highly efficient and reliable solution for cleaning hydraulic oil onboard ships and in power plants.

- > Used hydraulic oil can be recycled.
- > Reduced filter cartridge consumption.
- > Less contaminated oil and fewer filter cartridges to dispose of.
- > Less component wear and spare parts consumption.

Plug-and-play installation, simple to clean.

Emmie can be wheeled from tank to tank and hooked up in minutes. The system will then clean the hydraulic oil without supervision. When the separator bowl needs to be cleaned, usually after two to three days, cleaning is child's play and takes about five minutes.

The bottom line

Upgrading with Emmie will reduce your operating costs. Your local Alfa Laval representative will be pleased to show you how you can save money.

COST BENEFITS	Savings, Euro*
Reduced cost for filter cartridge disposal/replacement	
Less component wear and spare parts consumption	
Increased reliability and availability	
Reduced oil disposal/replacement cost	
Reduced maintenance cost	

* Fill in the boxes with your local Alfa Laval representative to calculate how much you can win by upgrading with Emmie. Or ask for a demonstration.